

CONSIDERATIONS CONCERNING ECOLOGICAL DENTISTRY

Matei Ruxandra*, Gabriela Radu*, Andrei Csep*

**University of Oradea, Faculty of Faculty of Medicine and Pharmacy, 3-5 Independenței St., 410048, Oradea, Romania*

Abstract

There is a Centuries have gone by and our population has become more and more oblivious to our surroundings. The glaciers, oceans, and land geography have immensely changed over the years. We are now able to depict the obvious changes in our natural structures and it has even caused a trickling effect on the habitats and lives of animals in those particular ecosystems. The problem is nobody is aware of these basic facts or statistics. In addition, we believe we can make a difference by spreading knowledge to the general public in ways that can change the future. If everyone worked together and noticed global warming as a serious upcoming issue, the number of people who recycled products would probably increase. We would prevent so much damage by recycling products along with preserving our amount of energy consumed.

Keywords: global warming, future generations, knowledge, key, environment friendly

INTRODUCTION

Some people who have studied global issues would say there was no such thing as global warming and it is all a big hoax. However, others disagree and believe that since the industrial revolution, we are having a negative affect on our environment. The best place to start is to look at what we have already been led to believe. The Greenhouse effect is the relationship between the earth and the sun. The sun provides the earth with the heat and energy it needs and the earth releases back that energy into space. The greenhouse effect comes into play as the gases in the earth trap that energy so that it cannot be released back into space therefore, warming the earths environment. The greenhouse effect is a natural process and vital to our survival, without it, the earth would be cold. Gases such as Methane, Carbon dioxide and water vapor all trap energy from the sun and enable the warming of the earth. It is commonly known that plants provide Carbon dioxide (CO₂), but not so commonly known that plants also remove carbon dioxide. This is because, when a plant dies and is buried into the earth, these plants become fossil fuel which is coal and oil. When coal and oil is burned, this then removes the carbon dioxide from the air around it. 200 years ago, before machinery was invented and cars filled our streets, global warming wasn't an issue. The natural gases which came from the earth would trap energy to warm the earth, however, since the industrial revolution, more gases are being produced, which means more energy is trapped and result is global warming.

Activists and researchers cannot agree as to whether or not humans are causing global warming, but we think we can all agree that when something unnatural occurs, it affects the natural. If we are producing more gases than what is known as natural, then you would expect that this would have an affect on our environment, but whether or not this affect is causing global warming, well, we will have to leave that down to the scientists. It is said that in the last century the earth has warmed by 1%, although this is not a massive amount, it still could be an unnatural 1% which would have an effect on the earth's climate. The truth of the matter is, the earth works in a certain way that even the best scientists in the world cannot fathom it. We can never assume we know it all just as we cannot 100% rely on what we already believe we know as there could be many unknown factors that have not been taken into account. It is natural to believe that we are having some kind of affect on our environment in comparison to 200 years ago, but is the cause of global warming?

MATERIALS AND METHODS

According to a 2007 article by the Canadian Dental Association Eco-friendly dentistry attempts to reduce the industry's detrimental impact on the environment and promote environmental awareness and sustainability to patients. It is an approach of dentistry that encourages sustainable practices by reducing resource consumption and waste. Eco-friendly dentistry also tries to increase the health of patients by reducing chemical use in the clinics and using low volatile substances (Amariei; Miyasaki-Ching). Patients are encouraged to take part in sustainability in many ways such as decreasing water consumption while brushing their teeth. A sustainable practice takes the cooperation of the dentist and the patient. Eco-friendly dentist offices take into consideration patient volume, consumption of dental resources, electricity, energy, chemical and water usage, and waste and try to implement environmentally friendly alternatives.

RESULTS AND DISCUSSIONS

The four R's

Four R's is a strategy implemented by dental professionals to help make an easier transition to a more sustainable practice (Pockrass, F., & Pockrass, I.)

Rethink - Every decision is made with a certain mindset, and redeveloping a mindset is a strategy for change. Environmentalism and sustainability are both considered states of the mind. Rethinking the way that dentist offices are run is the initial step in trying to change the modern practice. Implementing simple changes like things you can add or change,

and decrease energy and water consumption are the initial strategies to consider.

Reduce - In order to decrease the pressure on the Earth's resources, people must decrease or reduce their consumption of them. For example to prevent deforestation of forests, and slow down global warming we must reduce our consumption of paper and production of waste respectively.

Reuse - This strategy encourages the prolonged use of item; to prevent the item from contributing to waste being put in landfills. Finding a new purpose for an item extends its life and decreases contributions to landfills. By reusing items, we take the pressure off of natural resources by decreasing the demand for extraction. By reusing products, it also reduces the amount of energy needed to produce new products.

Recycle - Much of the waste that is found in landfills can be reprocessed and recycled into a new product. To reduce the waste of useful products, reduce the waste of raw materials and energy needed to extract the materials, reduce water pollution and air pollution from landfills and incinerators respectively, recycling products is a viable way to reduce overall contamination of the environment. It is a crucial component of the management of waste hierarchy. Innovations and eco-friendly dental products.

CONCLUSIONS

There have been many technologies designed to enhance the sustainability of dental practices (Torabi). Simple rethink, reduce, reuse, and recycle steps are the initial ones to implement in the clinic before applying more advanced technologies. Reducing the amount of disposable autoclave wraps and disposable bibs can be done by using a sterilization program. Clinics can use reusable cotton towels instead of disposable plastic or paper bibs. The clinic can use the neighborhood recycling program to reduce the amount of recyclable items being disposed in landfills. To reduce the water consumption of the clinic they can use a dry dental vacuum pump that saves over 190 liters of potable water per year instead of wet pumps.

One time use plastic syringes can be replaced by stainless steel syringes that can be sterilized and reused multiple times. There are many low cost, eco friendly and simple options that dentists can implement in their clinics:

- use energy star washing machines and dryers
- use fluorescent lighting
- use low volatile paints
- use digital radiology instead of film based x-rays.

All of these options are easy to access and are economically and financially viable. Simple steps can be taken to reduce the environmental contamination produced by a dental practice.

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